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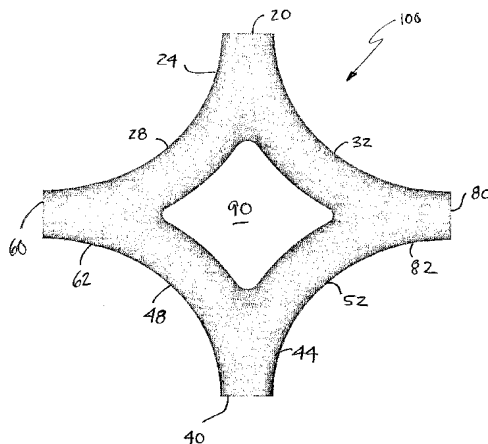
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(54) Title: ANATOMICAL CONNECTION



(57) Abstract: A device for use in the total cavopulmonary connection (TCPC) in order to optimize its hemodynamics. Although the current procedure of choice for single ventricle heart repairs, the TCPC has reduced the post-operative mortality to the level of simpler types of congenital heart disease repairs, Fontan patients are still subjected to serious long-term complications. The TCPC procedure, which restores the vital separation between oxygenated and deoxygenated blood, also leads to an increased workload for the remaining single ventricle, as it is now responsible for pumping the blood through both the systemic and pulmonary circulation. The present device reduces this workload by altering the surgically created design of the TCPC. Improved fluid mechanics and reduced energy dissipation at the connection site translates into less work for the single ventricle and improved transport of deoxygenated blood to the lungs, which may in turn contribute to improved post-operative results and quality of life.

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**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,

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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations
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